CLIMATE CHANGE, PREDICTICTION AND RETURN PRECIPITATION IN MOROCCO

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The atmospheric conditions prevailing since September 2007 to put the global geoclimatic space of the Western Mediterranean to cool conditions, characterized by moderate air temperatures, abnormal negative pressure, positive temperature anomalies of "SST" in Atlantic Ocean and Western Mediterranean, with the return of precipitation in North Africa and in South-West Europe.

Events 2006-2007 that was not seen for at least 20 years, it turned out that the phenomenon "El Niño 2006-2007: an event upset" as was stated in a press release from the IRD in March 2007, has not performed as usual scenarios. Indeed, instead of "El Niño" reaches its peak in December 2006, a turnaround was achieved by the return to normal.

During this time of year, and under these conditions, there is the installation of a system of atmospheric circulation called "transition" between summer and winter. This system is characterized by the appearance of depression centers in the Western Mediterranean and Northeast Atlantic, and the rocking of the circulation from West to the South in the form of a meridional circulation. This swing takes the form which creates wave of South-West North-East and North West South East, which swept North Africa and South-West Europe, thus leaving achieve a energy conversion often in the form of rain, which could cause dangerous floods, such events of the fall 2007 in Algeria and Tunisia, and end in September 2008 in Morocco.

These conditions should persist throughout the autumn season and continue in winter, which should give us a wet year at the national level.

Oceanic conditions of the regional climate system is characterized by the appearance of surface ocean "SST" with a warm anomaly, which facilitates the exchange positive vertical heat between the ocean and atmosphere, and allows it to convey a tremendous amount of moisture, which turns into a torrential rain in the event of rain, which become more common in these conditions.

The underlying reasons for this unusually wet reside in the persistent phase of La Niña in the Pacific since September 2006, which has influenced the atmospheric circulation and ocean on a global level and particularly in our latitudes and west facades of continents.

This time, we observed the same phenomenon in the opposite direction. Since December 2008, has seen the installation of an equatorial Atlantic cold event similar to the Pacific is "La Niña" Atlantic (Fig. 1 & 2), which finally stopped the power supply of the oceanic Hadley cell, weakened Azores High, and installed a very slow movement in Morocco, North Africa and South-West Europe during the winter and spring 2009.

These weather events are now known to scientists, and can be tracked and predicted using space technology and know-how and should serve as an aid to decision makers for our country, with a view to planning effective against the risks of environmental and social security for sustainable development.

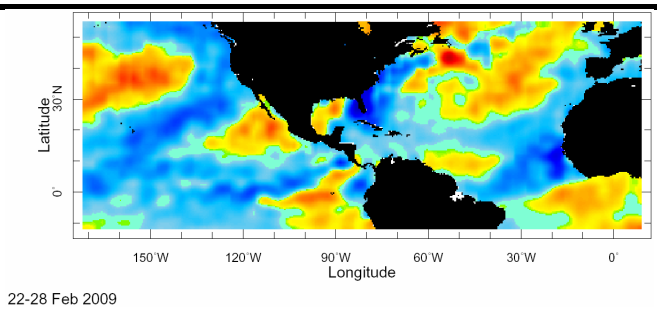

Fig. 1 : SST anomaly in February 2009 (CPC-NOAA)

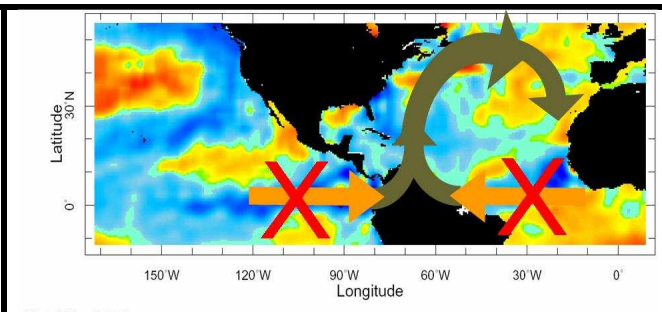

Fig. 2 : SST anomaly in mars 2009 (CPC-NOAA)